

**REMARKS**

Claims 1-4, 16-20 and 22 have been rejected under 35 U.S.C. §102 as anticipated by the reference to Yoneda et al. U.S. Patent No. 5,976,702 for the reasons indicated at items 4a-4e on pages 2 and 3 of the patent Office Action. Claims 5 and 6 have been rejected under 35 U.S.C. §103 as unpatentable over the '702 reference to Yoneda et al. and further in view of the reference to Allemand et al. U.S. Patent No. 6,178,034 for the reasons indicated at items 6f and g on pages 4 and 5. Claim 8 has been rejected under 37 U.S.C. §103 as unpatentable over Coleman U.S. Patent No. 4,731,289 and claims 13-15 have been rejected under 35 U.S.C. §103 as unpatentable over Yoneda et al. 702, Allemand et al. 034 and Fix U.S. Patent No. 6,055,088. Claims 7 and 21 have been rejected under 35 U.S.C. §103 as unpatentable over Yoneda et al. '702 and claims 8 and 9 have also been rejected under 35 U.S.C. §103 as being unpatentable over Yoneda in view of Allemand '034. Lastly, claims 10-12 have been rejected over the combination of Yoneda '702 and Rensch U.S. Patent No. 6,092,915.

The above rejections are duplicates of the rejections in the first Office Action of September 6, 2002. Applicants' amendment and response filed in the February 6, 2003 amendment address each of these rejections and the following will be addressed to the "Response to Arguments" section 12 at pages 8 and 9 of the

patent Office Action which respond to the arguments presented by Applicants' in the February 6 Amendment.

The Examiner has rejected Applicants arguments that the thermal emission coefficient is not "low" in the '289 reference to Coleman. According to the Examiner, the Coleman reference does disclose a "low" thermal emission coefficient indicating that the term "low" is relative and the Examiner maintains that the '289 reference is not a "black body" and therefore it is a "low" thermal emission coefficient. Furthermore the Examiner maintains that there is no support in the '289 reference for Applicants assertion that the thermal emission coefficient is "near 1" and it is believed to be inherently "low" since it is a see through structure and not a black body, which would have a thermal emission coefficient of 1, because it is a perfect radiator and perfect absorber.

Applicants submit that the Examiner has provided a wrong context for the term "thermal emission coefficient". Because Coleman has a "see through structure," it obviously means that the structure is transparent with respect to visible light, which has a range between 380nm to 780nm. However, visible light is not the same as thermal radiation. Thermal radiation is the context in which the term "thermal emission coefficient" is normally used. Visible light does not provide any indication as to whether radiation is passed.

In conclusion with respect to the Coleman document, it is concerned with visible light and Applicants invention is concerned with a "light" with a completely different range length, i.e. light in the thermal infrared which ranges approximately from 8 microns and 10 microns.

Applicants have previously indicated that a human with a body temperature at approximately 36 °C emits radiation in the range of 10 mm because of Planck's Rule. Obviously a human does not emit visible light.

Therefore the Examiner's position concerning a "black body" does not apply. A black body is a theoretically ideal radiator and absorber of energy at all electromagnetic wavelength. An object which has a thermal emission coefficient of approximately 1 for a given wavelength is not necessarily a black body.

In order for an object to be a black body its thermal coefficient is 1 or substantially 1 within the whole electromagnetic spectrum. This is important because Applicants specifically involve a wavelength range of only approximately 10 micrometers of the electromagnetic spectrum as being related to the thermal emission coefficient. An object can have a different absorption for different wavelengths so that is possible that the thermal absorption coefficient can be approximately 1 within a particular wavelength range without the object being a "black body".

Applicants also traversed the Examiners indication concerning the Yoneda '702 reference while referring to the rejection at item 4a. More particularly the Examiner maintains that Yoneda discloses applying a "heat-reflective coating with a low thermal coefficient". However, Applicants submit that there is no support in Yoneda for this assertion. Lines 19-24 in column 1 have no disclosure for the "heat-reflective coating with a low thermal coefficient". Likewise there is no disclosure in any other part of the specification in Yoneda concerning heat-reflecting coating and there is no discussion of a coating providing radiation exchange with a passenger.

Claim 1 was also rejected under 35 U.S.C. 112, second paragraph, as being indefinite with respect to the term "provides improved radiation exchange". According to the Examiner, the claim is indefinite because it is stating a benefit that does not have any modifiers to the term and does not refer to any other way of doing things or has no frame of reference for what improved means.

Applicants respectfully traversed this rejection on the grounds that Claim 1 meets the requirements of 35 U.S.C. 112, because it indicates that the coating provides improved radiation exchange with a passenger in the airplane cabin. The ordinary interpretation of such language is that the coating provides improved radiation exchange for the passenger in comparison with the structure before the coating was applied. Radiation exchange is improved by adding the coating to the

exterior surface of the cabin of the plane. This is no discussion of an improvement over some theoretical prior art, instead it is a specific indication that the function of the coating which is applied to the interior surface is to improve radiation exchange in comparison with the interior surface prior to coating. Thus claim 1 meets the requirements of 35 U.S.C. 112.

Therefore in view of the distinguished features between the claimed invention and the references which features are not shown or disclosed or made obvious by the references or any obvious combination, as indicated in the Amendment filed February 6, 2003, and in view of the above comments concerning the Examiner's contentions and in view of the sufficiency of claim 1 to make the requirements of 35 U.S.C. 112, Applicants respectfully request that this application containing claims 1-22 be allowed and be passed to issue.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #843/49983).

Respectfully submitted,

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